## SECTION A (50 marks)

1. The table below shows the probability distribution of a discrete random variable X , where a is a constant and p>0 .

X	0	1	2
P(X=x)	1 - 4p	ар	p

- (a) Find a.
- (b) If  $Var(2X + a^2) = 8E(aX 1)$ , find p.

(6 marks)

Answers written in the margins will not be marked.

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